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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 August 2008*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16,25-33,36 and 37* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16,25-33,36 and 37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail. Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This office action is responsive to application No. 10/772,130 filed on 08/18/2008.

Claims 34, 35, and 37 are cancelled and **Claims 1-16, 25-33, and 36-37** are pending

and have been examined

Response to Arguments

2.   Applicant's arguments with respect to **Claims 1-16, 25-33, and 36-37** have been

considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   **Claims 1, 4, 6, and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable

over Knudson (US 7,254,823) herein after referred to as Knudson'823, in view of

D'Souza et al. (US 2006/0117348), in view of Jerding et al. (US 6,792,616) herein after

referred to as Jerding'616, and further in view of Houghton et al. (US 2005/0021609).

Consider **claim 1,** Knudson'823 teaches a method comprising:

outputting an Electronic Programming Guide (EPG) for display by a client

(Fig.10), wherein:

EPG data originates from a server (Col 4: lines 33-35, Col 5: lines

11-17);

the EPG includes a plurality of representations of a plurality of content for simultaneous display by the client (Fig.10; Col 6: lines 12-19, Col 7: line 63 - Col 8: line 6, Col 9: lines 5-14);

the EPG is configured to form one or more events in response to user interaction with one or more said representations (Col 9: lines 5-14, Col 5: lines 43-46);

Knudson'823 does not explicitly teach at least one said content is television programming for receipt by the client over an Internet;

the client includes a plurality of applications;

one or more said content is provided for output by a respective said application; and

wherein the one or more events are based on information other than application identification information originating from the server; and

executing a virtual tuner on the client to manage execution of each said plurality of applications to provide respective said content in response to the events formed utilizing the guide, said virtual tuner utilizing an application identification table that includes a listing of one or more applications to enable execution of each said plurality of applications.

In an analogous art D'Souza teaches, the client includes a plurality of applications (Software programs 214, 216, 218, 220 – Fig.2; Paragraph 0029-0030, 0037-0038);

one or more said content is provided for output by a respective said application (Paragraph 0037-0038); and

wherein the one or more events are based on information other than application identification information originating from the server (Paragraph 0029, 0037-0038); and

executing a virtual tuner on the client to manage execution of each said plurality of applications to provide respective said content in response to the events formed utilizing the guide (Knudson'823 - Col 9: lines 5-14, Col 5: lines 43-46; D'Souza - application launcher 220-Fig.2; Paragraph 0029, 0037-0038 teaches software which manages the execution of each of the applications in response to events formed utilizing the guide),

Therefore, it would have been obvious to a person of ordinary skill in the art to modify Knudson'823s system to include the client includes a plurality of applications; one or more said content is provided for output by a respective said application; and wherein the one or more events are based on information other than application identification information originating from the server; and executing a virtual tuner on the client to manage execution of each said plurality of applications to provide respective said content in response to the events formed utilizing the guide, as taught by D'Souza, for the advantage of allowing a variety of desired content to be launched and played to the user independently by the system, providing a more intuitive, versatile, and robust system having greater control and management over execution of content.

Knudson'823and D'Souza do not explicitly teach at least one said content is television programming for receipt by the client over an Internet;

said virtual tuner utilizing an application identification table that includes a listing of one or more applications to enable execution of each of said plurality of applications.

In an analogous art Jerding'616 teaches, a virtual tuner utilizing an application identification table that includes a listing of one or more applications to enable execution of each of said plurality of applications (Col 11: lines 39-56; Col 10: lines 40-54; Col 11: lines 42-46).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Knudson'823 and D'Souza to include a virtual tuner utilizing an application identification table that includes a listing of one or more applications to enable execution of each of said plurality of applications, as taught by Jerding'616, for the advantage of better organization and efficiency for determining the appropriate applications to execute on the client.

Knudson'823, D'Souza, and Jerding'616 do not explicitly teach at least one said content is television programming for receipt by the client over an Internet;

In an analogous art Houghton teaches, that the content is television programming for receipt by the client over an Internet (Paragraph 0009-0010 teaches receiving web content over communications card 121-Fig.4. The web

content may be sports event or a continuous series of programming that is
transmitted over the internet).

Therefore, it would have been obvious to a person of ordinary skill in the
art to modify the system of Knudson'823, D'Souza, and Jerding'616 to include at
least one said content is television programming for receipt by the client over an
Internet, as taught by Houghton, for the advantage of providing programming that
might have otherwise been unavailable for which a broadcast network who has
viewing rights, but decides not to broadcast the event (Houghton - Paragraph
0010).

Consider **claim 4,** Knudson'823, D'Souza, Jerding'616, and Houghton
teach managing one or more windows; and at least one of said window is utilized
to display the respective said content (D'Souza - Paragraph 0033).

Consider **claim 6,** Knudson'823, D'Souza, Jerding'616, and Houghton
teach wherein said content provided by a first said application is not compatible
with a second said application (D'Souza - Paragraph 0037-0038 teaches
launching different applications based on the type of content that is to be played.
Therefore, only their corresponding application can play the selected content, so
content that is executable by one application is not executable by another).

Consider **claim 8,** Knudson'823, D'Souza, Jerding'616, and Houghton

teach one or more computer readable-media comprising computer executable

instructions that, when executed on a computer, direct the computer to perform

the method of claim 1 (D'Souza - Paragraph 0022-0023).

5.   **Claims 2 and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Knudson (US 7,254,823) herein after referred to as Knudson'823, in view of D'Souza et

al. (US 2006/0117348), in view of Jerding et al. (US 6,792,616) herein after referred to

as Jerding'616, in view of Houghton et al. (US 2005/0021609), and further in view of

Jerding (US 6,738,982) herein after referred to as Jerding'982.

Consider **claim 2,** Knudson'823, D'Souza, Jerding'616, and Houghton do

not explicitly teach wherein the virtual tuner is further executed to manage a

lifecycle of each said application.

In an analogous art Jerding'982 teaches, manage a lifecycle of each said

application (Col 3: lines 19-27 teaches a service application manager (SAM)

Fig.2, 29 that handles the lifecycle of the applications).

Therefore, it would have been obvious to a person of ordinary skill in the

art to modify the system of Knudson'823, D'Souza, Jerding'616, and Houghton to

include manage a lifecycle of each said application, as taught by Jerding'982, for

the advantage of efficiently controlling the activation, suspension, and deletion of

applications (Jerding'982 - Col 3: lines 25-27), optimizing the control and the use

of resources available to the client device.

Consider **claim 5,** Knudson'823, D'Souza, Jerding'616, and Houghton do not explicitly teach wherein the managing of the one or more windows includes displaying the at least one said window in a foreground of a display in response to one or more said events.

In an analogous art Jerding'982 teaches, wherein the managing of the one or more windows includes displaying the at least one said window in a foreground of a display in response to one or more said events (Jerding'982 - Col 7: line 40 – Col 8: line 4 teaches displaying an underlying application in full screen mode and an email application overlaid on top {foreground} by the SAM 37-Fig.2 of the full screen mode application when a selectable link is activated {events}).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Knudson'823, D'Souza, Jerding'616, and Houghton to include wherein the managing of the one or more windows includes displaying the at least one said window in a foreground of a display in response to one or more said events, as taught by Jerding-982, for the advantage of emphasizing and bringing to the user's attention the desired material, efficiently organizing the visual display of material for the benefit of the user in order to easily view desired material.

6.   **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Knudson

(US 7,254,823) herein after referred to as Knudson'823, in view of D'Souza et al. (US

2006/0117348), in view of Jerding et al. (US 6,792,616) herein after referred to as

Jerding'616, in view of Houghton et al. (US 2005/0021609), and further in view of

Hoarty et al. (6,305,020).

Consider **claim 3,** Knudson'823, D'Souza, Jerding'616, and Houghton

teach launching the chosen one or more applications for outputting said content

selected utilizing the EPG (D'Souza - Paragraph 0029, 0037-0038).

D'Souza, Jerding'616, and Houghton do not explicitly teach terminating

the one or more applications said applications when the outputting is complete.

In an analogous art, Hoarty teaches terminating the one or more

applications said applications when the outputting is complete (Col 10: lines 11-

17 teaches a program managing display of content.   When outputting of the

content is over, the program follows the steps of call take down {termination} as

described in Col 9: lines 64-11)

Therefore, it would have been obvious to one of ordinary skill in the art to

modify the system of Knudson'823, D'Souza, Jerding'616, and Houghton to

include terminating the one or more applications said applications when the

outputting is complete, as taught by Hoarty, for the advantage of freeing up

resources for subsequent use by other applications making efficient use of

available resources on the system.

7.   **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Knudson

(US 7,254,823) herein after referred to as Knudson'823, in view of D'Souza et al. (US

2006/0117348), in view of Jerding et al. (US 6,792,616) herein after referred to as

Jerding'616, in view of Houghton et al. (US 2005/0021609), and further in view of

Hassell et al (2007/0033615).

        Consider **claim 7,** Knudson'823, D'Souza, Jerding'616, and Houghton

teach wherein the plurality of content (D'Souza - Paragraph 0027) includes

remote content available over the Internet (Houghton - Paragraph 0009-0010

teaches receiving web content over communications card 121-Fig.4. The web

content may be sports event or a continuous series of programming that is

transmitted over the internet), but does not explicitly teach local content available

locally on the client.

        In an analogous art, Hassell teaches local content available locally on the

client (Paragraph 0038-0041 teaches programs stored in digital storage device

Fig.3, 4 and displaying the stored programs on a selectable programs listing grid

shown in Fig. 5b for selection and playback. Paragraph 0022-0023 and 0025

teaches that the digital storage device Fig.2, 31 can be contained at the set-top

box 28 [client] where user equipment Fig.3, 22 is a more generalized

embodiment of user equipment Fig.2, 22).

        Therefore, it would have been obvious to one of ordinary skill in the art to

modify the system of Knudson'823, D'Souza, Jerding'616, and Houghton to

include local content available locally on the client, as taught by Hassell, for the

advantage of providing stored programming to the user that can be watched
anytime and as many times desired at their own leisure.

8.   **Claims 9, 11, 13, 14, and 16** are rejected under 35 U.S.C. 103(a) as being
unpatentable over Knudson (US 7,254,823) herein after referred to as Knudson'823 in
view of D'Souza et al. (US 2006/0117348).

Consider **claim 9,** Knudson'823 teaches, a method comprising:

receiving a selection made from a plurality of content using an EPG that is
output by the client (Col 9: lines 5-14, Col 5: lines 43-46), wherein:

the EPG includes a representation of each said content for simultaneous
display by the client (Fig.10; Col 6: lines 12-19, Col 7: line 63 - Col 8: line 6, Col
9: lines 5-14);

at least one said content is television programming (Fig.10; Col 5: lines
62-63;

Knudson'823 does not explicitly teach a virtual tuner executed on a client;

each said content is provided for output by a respective one or more of a
plurality of applications;

choosing one or more of the plurality of applications that, when executed,
provide the selected content, wherein the choosing is independent of any
application identifying information originating from a computer distinct from the
client; and

managing execution of the chosen one or more applications to output the selected content.

In an analogous art D'Souza teaches, a virtual tuner executed on a client (application launcher 220-Fig.2; Paragraph 0029, 0037-0038);

each said content is provided for output by a respective one or more of a plurality of applications (Paragraph 0029-0030, 0037-0038);

choosing one or more of the plurality of applications that, when executed, provide the selected content, wherein the choosing is independent of any application identifying information originating from a computer distinct from the client (application launcher 220-Fig.2; Paragraph 0029, 0037-0038 teaches software which manages the execution of each of the applications in response to events formed utilizing the guide); and

managing execution of the chosen one or more applications to output the selected content (Paragraph 0029, 0037-0038).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify Knudson'823s system to include a virtual tuner executed on a client; each said content is provided for output by a respective one or more of a plurality of applications; choosing one or more of the plurality of applications that, when executed, provide the selected content, wherein the choosing is independent of any application identifying information originating from a computer distinct from the client; and managing execution of the chosen one or more applications to

output the selected content, as taught by D'Souza, for the advantage of allowing

a variety of desired content to be launched and played to the user independently

by the system, providing a more intuitive, versatile, and robust system having

greater control and management over execution of content.

Consider **claim 11,** Knudson'823 and D'Souza teach wherein the

managing is performed in response to one or more events received from the

EPG (D'Souza - Paragraph 0029, 0036).

Consider **claim 13,** Knudson'823 and D'Souza teach wherein said content

provided by a first said application is not compatible with a second said

application (D'Souza - Paragraph 0037-0038 teaches launching different

applications based on the type of content that is to be played. *Therefore, only*

their corresponding application can play the selected content, so content that is

executable by one application is not executable by another).

Consider **claim 14,** Knudson'823 and D'Souza teach wherein: the

managing includes managing one or more windows; and at least one of said

window is utilized to display the selected content (D'Souza - Paragraph 0033).

Consider **claim 16,** Knudson'823 and D'Souza teach one or more

computer readable-media comprising computer executable instructions that,

when executed on a computer, direct the computer to perform the method of

claim 9 (D'Souza - Paragraph 0022-0023).

9.   **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over

Knudson (US 7,254,823) herein after referred to as Knudson'823, in view of D'Souza et

al. (US 2006/0117348), and further in view of Hoarty et al. (6,305,020).

Consider **claim 10,** Knudson'823 and D'Souza teaches launching the

chosen one or more applications for outputting the selected said content

(D'Souza - Paragraph 0029, 0037-0038).

Knudson'823 and D'Souza does not explicitly teach terminating the

chosen one or more applications when the outputting is completed or an event is

received from the EPG.

In an analogous art, Hoarty teaches terminating the chosen one or more

applications when the outputting is completed or an event is received from the

EPG (Col 10: lines 11-17 teaches a program managing display of content.

When outputting of the content is over, the program follows the steps of call take

down {termination} as described in Col 9: lines 64-11)

Therefore, it would have been obvious to one of ordinary skill in the art to

modify the system of Knudson'823 and D'Souza to include terminate the chosen

one or more applications when the outputting is completed or an event is

received from the EPG, as taught by Hoarty, for the advantage of freeing up

resources for subsequent use by other applications making efficient use of

available resources on the system.

10.   **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over

Knudson (US 7,254,823) herein after referred to as Knudson'823, in view of D'Souza et

al. (US 2006/0117348), and further in view of Jerding (US 6,738,982) herein after

referred to as Jerding'982.

Consider **claim 12,** Knudson'823 and D'Souza do not explicitly teach

managing includes managing a lifecycle of the chosen one or more applications.

In an analogous art Jerding'982 teaches, managing includes managing a

lifecycle of the chosen one or more applications (Col 3: lines 19-27 teaches a

service application manager (SAM) Fig.2, 29 that handles the lifecycle of the

applications).

Therefore, it would have been obvious to a person of ordinary skill in the

art to modify the system of Knudson'823 and D'Souza to include managing

includes managing a lifecycle of the chosen one or more applications, as taught

by Jerding'982, for the advantage of efficiently controlling the activation,

suspension, and deletion of applications (Jerding'982 - Col 3: lines 25-27),

optimizing the control and the use of resources available to the client device.

11.   **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over

Knudson (US 7,254,823) herein after referred to as Knudson'823, in view of D'Souza et

al. (US 2006/0117348), in view of Houghton et al. (US 2005/0021609), and further in
view of Hassell et al (2007/0033615).

Consider **claim 15**, Knudson'823 and D'Souza teaches a plurality of
content (Knudson - Col 9: lines 5-14, Col 5: lines 43-46; D'Souza - Paragraph
0027), but do not explicitly teach that it includes remote content available over
the Internet and local content available locally on the client.

In an analogous art Houghton teaches, remote content available over the
Internet (Paragraph 0009-0010 teaches receiving web content over
communications card 121-Fig.4. The web content may be sports event or a
continuous series of programming that is transmitted over the internet).

Therefore, it would have been obvious to a person of ordinary skill in the
art to modify the system of Knudson'823 and D'Souza to include remote content
available over the Internet, as taught by Houghton, for the advantage of providing
programming that might have otherwise been unavailable for which a broadcast
network who has viewing rights, but decides not to broadcast the event
(Houghton - Paragraph 0010).

Knudson'823, D'Souza, and Houghton do not explicitly teach local content
available locally on the client.

In an analogous art, Hassell teaches local content available locally on the
client (Paragraph 0038-0041 teaches programs stored in digital storage device
Fig.3, 4 and displaying the stored programs on a selectable programs listing grid
shown in Fig. 5b for selection and playback. Paragraph 0022-0023 and 0025

teaches that the digital storage device Fig.2, 31 can be contained at the set-top

box 28 [client] where user equipment Fig.3, 22 is a more generalized

embodiment of user equipment Fig.2, 22).

 Therefore, it would have been obvious to one of ordinary skill in the art to

modify the system of Knudson'823, D'Souza, and Houghton to include local

content available locally on the client, as taught by Hassell, for the advantage of

providing stored programming to the user that can be watched anytime and as

many times desired at their own leisure.

12. **Claims 25 and 27-29** are rejected under 35 U.S.C. 103(a) as being unpatentable

over Knudson (US 7,254,823) herein after referred to as Knudson'823, in view of

D'Souza et al. (US 2006/0117348), and further in view of Jerding et al. (US 6,792,616)

herein after referred to as Jerding'616.

 Consider **claim 25,** Knudson'823 teaches a client (40-Fig.1) comprising:

 a processor (Col 5: lines 5-7);

 a network interface, communicatively coupled to the processor, configured

to provide a network connection to a wide area network (WAN) (Fig.1, Col 1:line

61 – Col 4: line 43 teaches an entire network that the receiver is connected to

{WAN}. Col 4: lines 33-43 teaches one or more uni or bidirectional

communication paths to the receiver for delivery of content. *Therefore, the*

receiver inherently has a network interface for connecting to the outside network

to receive the content via the communication path(s), and is communicatively

coupled to the processor in order to receive, process, and display such content

received);

a output interface, communicatively coupled to the processor, configured

to provide an output for rendering by a display device (television 48-Fig.1; Col 5:

lines 31-38); and

memory configured to maintain (Col 5: lines 5-7, Col 4: lines 33-43

teaches a processor that handles tasks associated with implementing a guide

application, and the user device receiving different types of information,

therefore, the user device inherently has some sort of memory to store

information and instructions to implement a guide application):

an EPG engine that is executable on the processor to provide an EPG for

output on the output interface (Col 5: lines 5-7 teaches a program guide

application handled and implemented by the processor. Col 5: lines 31-38

teaches presenting the program guide on the television 48-Fig.1), wherein the

EPG simultaneously displays a plurality of representations of said content for

selection (Fig.10; Col 6: lines 12-19, Col 7: line 63 - Col 8: line 6, Col 9: lines 5-

14); and

Knudson'823 does not explicitly teach a plurality of applications that are

executable on the processor to provide an output of content on the output

interface, wherein at least one said content is television programming received at the network interface;

a virtual tuner that is executable on the processor to launch one or more of said plurality of applications in response to selection of said content using the guide, independent of any application identifying information originating from a computer distinct from the client, said virtual tuner utilizing an application identification table that includes a listing of one or more applications to enable execution of each of said plurality of applications.

In an analogous art D'Souza teaches, memory (memory 212-Fig.2) configured to maintain:

a plurality of applications that are executable on the processor to provide an output of content on the output interface, wherein at least one said content is television programming received at the network interface (Software programs 214, 216, 218, 220 – Fig.2; Paragraph 0021 teaches receiving video programming via network interface 208-Fig.2; Paragraph 0029-0030, 0037-0038 teaches different applications that may be executed to provide content outputted to the display device for display to the client, where the content can be video programming);

a virtual tuner that is executable on the processor to launch one or more of said plurality of applications in response to selection of said content using the guide, independent of any application identifying information originating from a computer distinct from the client (application launcher 220-Fig.2; Paragraph

0029, 0037-0038 teaches software which manages the execution of each of the applications in response to selection of content utilizing the EPG),

Therefore, it would have been obvious to a person of ordinary skill in the art to modify Knudson'823s system to include the client includes a plurality of applications that are executable on the processor to provide an output of content on the output interface, wherein at least one said content is television programming received at the network interface; a virtual tuner that is executable on the processor to launch one or more of said plurality of applications in response to selection of said content using the guide, independent of any application identifying information originating from a computer distinct from the client, as taught by D'Souza, for the advantage of allowing a variety of desired content to be launched and played to the user independently by the system, providing a more intuitive, versatile, and robust system having greater control and management over execution of content.

Knudson'823 and D'Souza do not explicitly teach said virtual tuner utilizing an application identification table that includes a listing of one or more applications to enable execution of each of said plurality of applications.

In an analogous art Jerding'616 teaches, a virtual tuner utilizing an application identification table that includes a listing of one or more applications to enable execution of each of said plurality of applications (Col 11: lines 39-56; Col 10: lines 40-54; Col 11: lines 42-46).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Knudson'823 and D'Souza to include a virtual tuner utilizing an application identification table that includes a listing of one or more applications to enable execution of each of said plurality of applications, as taught by Jerding'616, for the advantage of better organization and efficiency for determining the appropriate applications to execute on the client.

Consider **claim 27,** Knudson'823, D'Souza, and Jerding'616 teach manage one or more windows corresponding to the plurality of applications; and at least one of said window includes display of the selected said content (D'Souza - Paragraph 0033).

Consider **claim 28,** Knudson'823, D'Souza, and Jerding'616 teach the network interface is configured as a tuner for receiving one or more broadcasts of the television programming over the WAN; and the WAN is configured as a broadcast network (Knudson – Col 4: lines 33-52; D'Souza - Paragraph 0020-0021 teaches multiple customer set top boxes connected to the distribution network where they receive audio, video, and other types of data sent by the headend).

Consider **claim 29,** Knudson'823, D'Souza, and Jerding'616 teach

wherein the content provided by a first said application is not compatible with a

second said application (D'Souza - Paragraph 0037-0038 teaches launching

different applications based on the type of content that is to be played.

Therefore, only their corresponding application can play the selected content, so

content that is executable by one application is not executable by another).

13.   **Claim 26** is rejected under 35 U.S.C. 103(a) as being unpatentable over

Knudson (US 7,254,823) herein after referred to as Knudson'823, in view of D'Souza et

al. (US 2006/0117348), in view of Jerding et al. (US 6,792,616) herein after referred to

as Jerding'616, and further in view of Jerding (US 6,738,982) herein after referred to as

Jerding'982.

Consider **claim 26,** Knudson'823, D'Souza, and Jerding'616 teach do not

explicitly teach wherein the virtual tuner is further executable to terminate

execution of the one or more said applications.

In an analogous art Jerding'982 teaches, wherein a virtual tuner is further

executable to terminate execution of the one or more said applications

(erding'982 - Col 3: lines 19-27 teaches service application manager (SAM)

Fig.2, 29 that handles the lifecycle of applications on the system, including

suspension and deletion of services).

Therefore, it would have been obvious to a person of ordinary skill in the

art to modify the system of Knudson'823, D'Souza, and Jerding'616 to include

wherein a virtual tuner is further executable to terminate execution of the one or

more said applications, as taught by Jerding'982, for the advantage of efficiently

controlling the activation, suspension, and deletion of applications (Jerding'982 -

Col 3: lines 25-27), optimizing the control and the use of resources available to

the client device in order to save system resources.

14.   **Claim 30** is rejected under 35 U.S.C. 103(a) as being unpatentable over

Knudson (US 7,254,823) herein after referred to as Knudson'823, in view of D'Souza et

al. (US 2006/0117348), in view of Jerding et al. (US 6,792,616) herein after referred to

as Jerding'616, and further in view of Knudson et al. (6,526,577) herein after referred to

as Knudson'577.

Consider **claim 30,** Knudson'823, D'Souza and Jerding'616 do not

explicitly wherein the WAN is the Internet.

In an analogous art, Knudson teaches a WAN is the Internet (Col 5: lines

34-50 teaches video signals, e.g. television programs, that is distributed over

communications path Fig.2c, 20. Communications path 20 may be an Internet

link).

Therefore, it would have been obvious to one of ordinary skill in the art to

modify the system of Knudson'823, D'Souza, and Jerding'616 to have the WAN

as the internet, as taught by Knudson, for the advantage of providing

programming to users that might otherwise be unable to receive programming

over the air and do not have cable.

15.   **Claim 31** is rejected under 35 U.S.C. 103(a) as being unpatentable over

Knudson (US 7,254,823) herein after referred to as Knudson'823, in view of D'Souza et

al. (US 2006/0117348), in view of Jerding et al. (US 6,792,616) herein after referred to

as Jerding'616, and further in view of Hassell et al (2007/0033615).

Consider **claim 31,** Knudson'823, D'Souza, and Jerding'616 teach

wherein the content includes remote content available over the WAN (D'Souza -

Paragraph 0021, 0027), but does not explicitly teach local content available

locally on the client.

In an analogous art, Hassell teaches local content available locally on the

client (Paragraph 0038-0041 teaches programs stored in digital storage device

Fig.3, 4 and displaying the stored programs on a selectable programs listing grid

shown in Fig. 5b for selection and playback. Paragraph 0022-0023 and 0025

teaches that the digital storage device Fig.2, 31 can be contained at the set-top

box 28 [client] where user equipment Fig.3, 22 is a more generalized

embodiment of user equipment Fig.2, 22).

Therefore, it would have been obvious to one of ordinary skill in the art to

modify the system of Knudson'823, D'Souza, and Jerding'616 to include local

content available locally on the client, as taught by Hassell, for the advantage of

providing stored programming to the user that can be watched anytime and as

many times desired at their own leisure.

16.   **Claims 32 and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable

over Hassell et al. (US 2007/0033615), in view of D'Souza et al. (US 2006/0117348),

and further in view of Jerding et al. (US 6,792,616) herein after referred to as

Jerding'616.

Consider **claim 32,** Hassel teaches a system comprising:

a network (Fig.1; Paragraph 0017-0019);

an EPG provider communicatively coupled to the network including

remote EPG data that describes remote content that is available over the

network, the remote content including television programming (Fig.1; Paragraph

0017-0019);

a client communicatively coupled to the network (Fig.1; Paragraph 0017-

0019 teaches receiving information from the network, *therefore it is*

communicatively coupled to the network); and including:

one or more processors and application that is executable thereon to

provide at least one of local content and the remote content for rendering on a

display device, wherein the EPG includes a plurality of representations, and

wherein at least one said representation represents the remote content and

another said representation represents the local content (Paragraph 0024-0027

teaches processing circuitry that instructs a program guide implemented on user

equipment to generate a program guide display screen. Fig.5b, Paragraph 0038

teaches program listings that indicates currently stored program on a storage

device {local content} and program listings indicating other television programs
{remote content}. Paragraph 0022 teaches that the storage device can be
contained in set-top box 28-Fig.2. Paragraph 0041 teaches that the user may
select a stored program {local content} for playback and Paragraph 0026 teaches
allowing a user to watch television from a desired television channel {remote
content} on monitor 45-Fig.3); and

local EPG data that describes the local content (Paragraph 0038 teaches
program listings that indicates currently stored programs on a storage device.
Paragraph 0022 teaches that the storage device can be contained in set-top box
28-Fig.2);

a guide application that is executable to generate an EPG from the remote
and local EPG content that is configured to initiate one or more events, the
remote and local EPG content simultaneously displayed by the EPG, and
wherein the guide application is further executable to generate the local EPG
data by examining the client (Fig.5b; Paragraph 0038-0040 teaches an EPG
containing programs from storage device and programs from outside sources.
Paragraph 0041 teaches a user selecting a stored program listing and the EPG
issuing commands in response to the selection. Paragraph 0021 teaches storing
directory information about the content stored on the storage device, and
paragraph 0038. *In order for the directory information of available stored
program(s) to be shown, the guide application must examine the client first in
order to retrieve the necessary information to generate the guide*); and

Hassel does not explicitly teach a plurality of applications that are executable thereon, wherein said content provided by a first said application is not compatible with a second said application; and

a virtual tuner that is executable to manage the plurality of applications in response to the one or more events, said virtual tuner utilizing an application identification table that includes a listing of one or more applications to enable execution of each of the plurality of applications independent of any application identifying information originating from a computer distinct from the client.

In an analogous art D'Souza teaches, a plurality of applications that are executable thereon, wherein said content provided by a first said application is not compatible with a second said application (Software programs 214, 216, 218, 220 – Fig.2; Paragraph 0021 teaches receiving video programming via network interface 208-Fig.2; Paragraph 0029-0030, 0037-0038 teaches different applications that may be executed to provide content outputted to the display device for display to the client, where the content can be video programming. Paragraph 0022 teaches OS software in addition to various application software that are executed on set top terminal 202-Fig.2. *The fact that multiple applications are needed to launch different types of content and the content is first checked to determine what type of content it is prior to choosing the correct application to launch it, means that content that is provided by a first application is not compatible with a second application*); and

a virtual tuner that is executable to manage the plurality of applications in response to the one or more events (application launcher 220-Fig.2; Paragraph 0029, 0037-0038 teaches software which manages the execution of each of the applications in response to events formed utilizing the EPG), independent of any application identifying information originating from a computer distinct from the client (application launcher 220-Fig.2; Paragraph 0029, 0037-0038 teaches software which manages the execution of each of the applications in response to selection of content utilizing the EPG).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify Hassel's system to include a plurality of applications that are executable thereon, wherein said content provided by a first said application is not compatible with a second said application; and a virtual tuner that is executable to manage the plurality of applications in response to the one or more events, independent of any application identifying information originating from a computer distinct from the client, as taught by D'Souza, for the advantage of allowing a variety of desired content to be launched and played to the user independently by the system, providing a more intuitive, versatile, and robust system having greater control and management over execution of content.

Hassel and D'Souza do not explicitly teach said virtual tuner utilizing an application identification table that includes a listing of one or more applications to enable execution of each of the plurality of applications.

In an analogous art Jerding'616 teaches, a virtual tuner utilizing an application identification table that includes a listing of one or more applications to enable execution of each of the plurality of applications (Col 11: lines 39-56; Col 10: lines 40-54; Col 11: lines 42-46).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Hassel and D'Souza to include a virtual tuner utilizing an application identification table that includes a listing of one or more applications to enable execution of each of the plurality of applications, as taught by Jerding'616, for the advantage of better organization and efficiency for determining the appropriate applications to execute on the client.

Consider **claim 37,** Hassel, D'Souza, Jerding'616, and Hassell teach manages one or more windows that include a display of at least one of local and remote content (D'Souza - Paragraph 0033; Hassell - Fig.5b; Paragraph 0038-0041 teaches an EPG containing programs from storage device and programs from outside sources where upon selection can be displayed for play for the user).

17.   **Claim 33** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hassell et al. (US 2007/0033615), in view of D'Souza et al. (US 2006/0117348), in view of Jerding et al. (US 6,792,616) herein after referred to as Jerding'616, and further in view of Hoarty et al. (6,305,020).

Consider **claim 33,** Hassel, D'Souza, and Jerding'616 teach launching

one or more of the plurality of applications to process at least one of the local and

remote content (Hassell - Fig.5b; Paragraph 0038-0040 teaches an EPG

containing programs from storage device and programs from outside sources.

Paragraph 0041 teaches a user selecting a stored program listing and the EPG

issuing commands in response to the selection; D'Souza - Paragraph 0029,

0037-0038; Paragraph 000021).

Hassel, D'Souza, and Jerding'616 do not explicitly teach terminating the

one or more applications when the provision of the content is completed.

In an analogous art, Hoarty teaches terminating the one or more

applications when the provision of the content is completed (Col 10: lines 11-17

teaches a program managing display of content.   When outputting of the content

is over, the program follows the steps of call take down {termination} as

described in col 9: lines 64-11)

Therefore, it would have been obvious to one of ordinary skill in the art to

modify the system of Hassel, D'Souza, and Jerding'616 to include terminating the

one or more applications when the provision of the content is completed, as

taught by Hoarty, for the advantage of freeing up resources for subsequent use

by other applications making efficient use of available resources on the system.

18.   **Claim 36** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hassell

et al. (US 2007/0033615), in view of D'Souza et al. (US 2006/0117348), in view of

Jerding et al. (US 6,792,616) herein after referred to as Jerding'616, and further in view
of Jerding (US 6,738,982) herein after referred to as Jerding'982.

Consider **claim 36,** Hassel, D'Souza, and Jerding'616 do not explicitly
teach wherein the virtual tuner manages a lifecycle of each said application.

In an analogous art Jerding'982 teaches, manage a lifecycle of each said
application (Col 3: lines 19-27 teaches a service application manager (SAM)
Fig.2, 29 that handles the lifecycle of the applications).

Therefore, it would have been obvious to a person of ordinary skill in the
art to modify the system of Hassel, D'Souza, and Jerding'616 to include manage
a lifecycle of each said application, as taught by Jerding'982, for the advantage
of efficiently controlling the activation, suspension, and deletion of applications
(Jerding'982 - Col 3: lines 25-27), optimizing the control and the use of resources
available to the client device.

Conclusion

19.   Applicant's amendment necessitated the new ground(s) of rejection presented in
this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP
§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37
CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE
MONTHS from the mailing date of this action. In the event a first reply is filed within
TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to JASON K. LIN whose telephone number is (571)270-

1446. The examiner can normally be reached on Mon-Fri, 9:00AM-6:00PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Brian T. Pendleton can be reached on (571)272-7527. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

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J.L.

Examiner, Art Unit: 2425

/Brian T. Pendleton/
Supervisory Patent Examiner, Art Unit 2425